

**Notice of Allowability**

Application No.

10/749,687

Examiner

Sing P. Chan

Applicant(s)

KRONZER, FRANCIS JOSEPH

Art Unit

1791

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to pre-brief conference decision mailed on November 15, 2007.
2. ☒ The allowed claim(s) is/are 65-107.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 65-107 are allowed.

The following is an examiner's statement of reasons for allowance: The claims recite a method of applying an image to a substrate, the method comprising: providing a first heat transfer material that comprises: a first base layer; a first release layer overlying the first base layer; and a peelable transfer film on which the image is formed, wherein the peelable transfer film comprises an adhesive layer overlying the release layer and a flow-resistant layer overlying the adhesive layer, wherein the flow-resistant layer does not appreciably flow at a transfer temperature; providing a second heat transfer material that comprises: a second base layer; a second release layer overlying the second base layer; and an overlay transfer film overlying the second release layer; positioning the peelable transfer film between the substrate and the overlay transfer film, wherein the adhesive layer is positioned between the substrate and the flow-resistant layer; and applying heat and pressure to transfer the peelable transfer film and the overlay transfer film to the substrate such that the image is transferred to the substrate, wherein the adhesive layer and the overlay transfer film are melt-flowable at the transfer temperature, while the flow-resistant layer is not appreciably melt-flowable at the transfer temperature. Tada et al (U.S. 6,017,636) discloses a method of transferring an image to a substrate. The method includes providing a transfer sheet A with a release sheet and a layer of urethane emulsion resin (2) (Col 4, lines 41-62) with acrylic emulsion added (Col 5, lines 19-35) and a transfer sheet B with a release sheet,

and upper layer (6), an intermediate layer (5), and lower layer (4) (Col 5, lines 52-55), forming an image layer on the transfer sheet B (Col 7, lines 32-39), adhering the two transfer sheets together, peeling the release sheet from transfer sheet B, placing the layer exposed by peeling the release sheet onto the substrate, and transfer the laminate with heat and pressure to the substrate, and peeling the release sheet from transfer sheet A (Col 7, lines 10-25) with the image sheet between the transfer film of transfer sheet A and the substrate. Furthermore, the lower layer includes aromatic hydrocarbon to allow for accelerated softening to allow the layer to soften or melt to penetrate the inner surface of the object or substrate, i.e. melting before the intermediate layer (5) or the upper layer (6) melts, which has the same resin composition as the adhesive layer but without the aromatic hydrocarbon therefore, providing the intermediate layer (5) and the upper layer (6) as a flow resistant layer (Col 6, lines 40-64). However, Tada et al also disclose the intermediate layer (5) and upper layer (6) have the same urethane resin as urethane emulsion resin layer (2), which therefore, would not melt and flow. A search of the prior art of record did not disclose reference or references in combination with the recited feature.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sing P. Chan whose telephone number is 571-272-

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1225. The examiner can normally be reached on Monday-Thursday 7:30AM-11:00AM and 12:00PM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip C. Tucker can be reached on 571-272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
SPC

  
PHILIP C. TUCKER, PH.D.  
SUPERVISORY PATENT EXAMINER